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LOCAL LEADERSHIP AND THE EFFECTIVENESS OF EXTENSION WORK IN REACHING RURAL PEOPLE

A Study of 169 Local Extension Leaders, 439 Farms, and 92 Village Homes in Hamlin County, S. Dak., 1925

M. C. Wilson and W. F. Kumlien

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in Hamlin County, S. Dak., 1925

M. C. Wilson[2] and W. F. Kumlien[3]

GENERAL PLAN OF STUDY

The extension study described in this circular was made by the Office of Cooperative Extension Work, United States Department of Agriculture, and the Extension Service, South Dakota State College of Agriculture and Mechanic Arts. The study was undertaken to determine the extent to which local extension leaders are functioning as well as the effectiveness of the entire agricultural extension system in reaching rural people.

Personal calls were made by representatives of the Federal and State extension services upon the farmers, the farm home makers, and the village home makers, in addition to the local leaders of all lines of extension activity residing in the areas selected. The information obtained was recorded on questionnaire cards prepared for this purpose. The card shown in figure 1 was employed in interviewing farmers, farm women, and village women; the one shown in figures 2 and 3 was used in interviewing local leaders.

Area Included

Hamlin County was selected as a representative county where extension work had been on a stable basis for several years with work provided in home economics as well as in agriculture (Fig. 4). An attempt was made to call upon every person in the county who had served as local leader of any part of the extension program during the years 1923, 1924, and 1925. Information was obtained from 169 such leaders. Absence from home or other equally good reason accounted for failure to obtain records from the few remaining leaders whose names appeared on the records of the county extension agents for these years.

In the farm and farm home study records were obtained from 439 farms located in the eastern half of the county. This number was 98 per cent of all the farms located in this area. As a check upon the extent to which home economics extension is reaching the homes in small villages, 92 records were obtained from contiguous homes in the village of Lake Norden.

Corn, oats, wheat, and barley are extensively grown throughout Hamlin County. Potato growing is an important industry on many farms. The beef cattle industry is gradually giving way to dairying. Swine are found in considerable number on most farms.

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[1] The term "farm" as used in this circular refers to the farm and home as an economic unit and to the various individuals comprising the operator's family.

[2] In Charge Extension Studies, Office of Cooperative Extension Work, U. S. Department of Agriculture.

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No......... FARM AND HOME SURVEY OF THE RESULTS OF EXTENSION WORK Date.......

Name..........................Address.....................Community...............
Tenant............Owner........Phone.................Size of farm............
Years: On farms in county.....On this farm..........Kind of road.............
Types of farming.......................................Miles to agent's office..
...Member of what farmers' associations...
Member what home-makers' clubs...
No. in family: Adult.....Children (ages).........No. in school (10-20).......
Leadership in extension work: Farm..............Home.........................
Extension activities on farm: Adult..............Junior......................
In home: Adult..................................Junior..........................
Other ext. act's att'd or participated in.......................................
Contacts with Co. Agt....................H. D. Agent..........................
What specialists..
If no contact have circular letters or bulletins been received?..............
Names of local leaders from whom assistance has been received..............

Farm and home practices adopted	Methods largely responsible (see list below)	Extension agents involved: C.A.	H.D.A.	Spec'l.	Loc. ldr.
....	....	....	....	....	....
....	....	....	....	....	....

List below names of members of family who have carried on a junior project

Name	Present age	In school	Years in club work	Project	Why discontinued
a..............	....	....	....	....	....
b..............	....	....	....	....	....
c..............	....	....	....	....	....

Training after club work	Present occupation	Present contact with extension work	Remarks
a..............	....	....	....
b..............	....	....	....
c..............	....	....	....

How has your community benefited through extension work?.......................
....
Suggestions for the improvement of the service..................................
....
Attitude toward extension work..
Member of county farm bureau?..........Discontinued..............................
....

Abbreviations: Correspondence (cor.); office calls (o.c.); telephone calls(tel.) Farm & home visits(f.v.); Leader-training meeting(l.tr.); bulletins (bul.); circular letters(cir.l.); news service(n.s.); extension schools or short courses (e.s.); result demonstrations: Adult(dem.a), junior(dem.jr); method demonstration meeting(m.dem); general meeting(mtg); exhibits(exh); posters(p); indirect influence (ind.).

Fig. 1. - Obverse (upper) and reverse (lower) sides of questionnaire card used in interviewing farmers and home makers

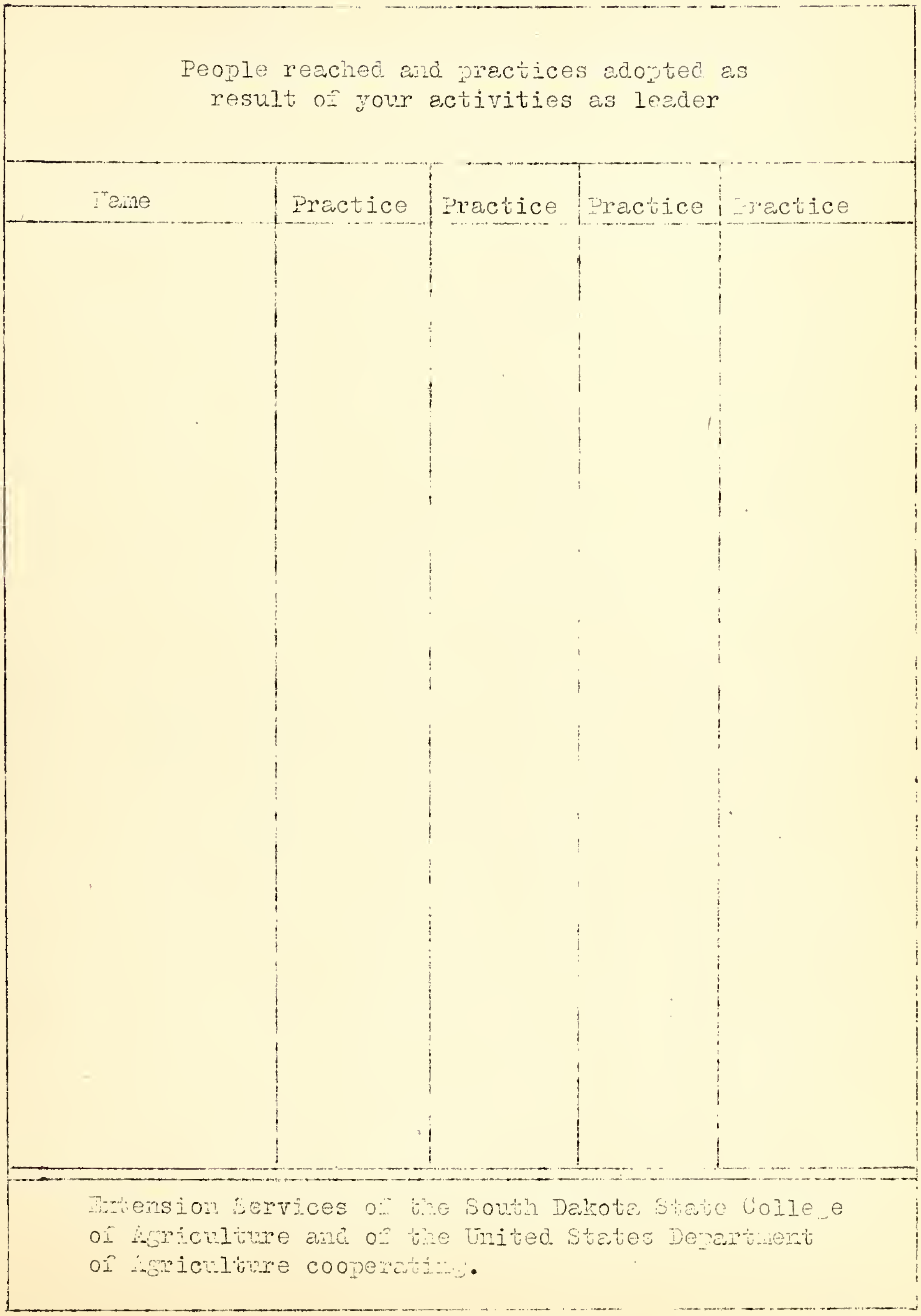
LEADERSHIP QUESTIONNAIRE

Name Address Farm No.
Occupation Leader: Adult work Junior work
Leader what project Years
How selected as leader: Volunteered Appointed by ext. agts.
By extension organization Elected
Were you consulted before appointment By whom
Education: Common school High school College
Other qualifications for leadership
Result demonstrations conducted on farm: Adult Junior
In home: Adult Junior
Training since becoming leader: No. training schools attended
No. individual conferences regarding leadership with C. A. H.D.A. Club A.
Specialists Other training
Formal activities conducted as leader and assistance received with each:

Activity	Assistance rendered by			
	C. A.	H. D. A.	Club A.	Specialists

Have reports been submitted regularly to extension office?
In what other ways have you forwarded project?
Why was leadership discontinued?
Reasons for not functioning as leader:
Days per year devoted to leadership work:
Have you profited through leadership? How
How may your work as leader be facilitated by extension workers?
Other suggestions for strengthening extension work:

Fig. 2. - Obverse side of questionnaire card used in interviewing local leaders



People reached and practices adopted as
result of your activities as leader

Name	Practice	Practice	Practice	Practice

Extension Services of the South Dakota State College
of Agriculture and of the United States Department
of Agriculture cooperating.

Fig. 3. - Reverse side of questionnaire card used in interviewing local leaders

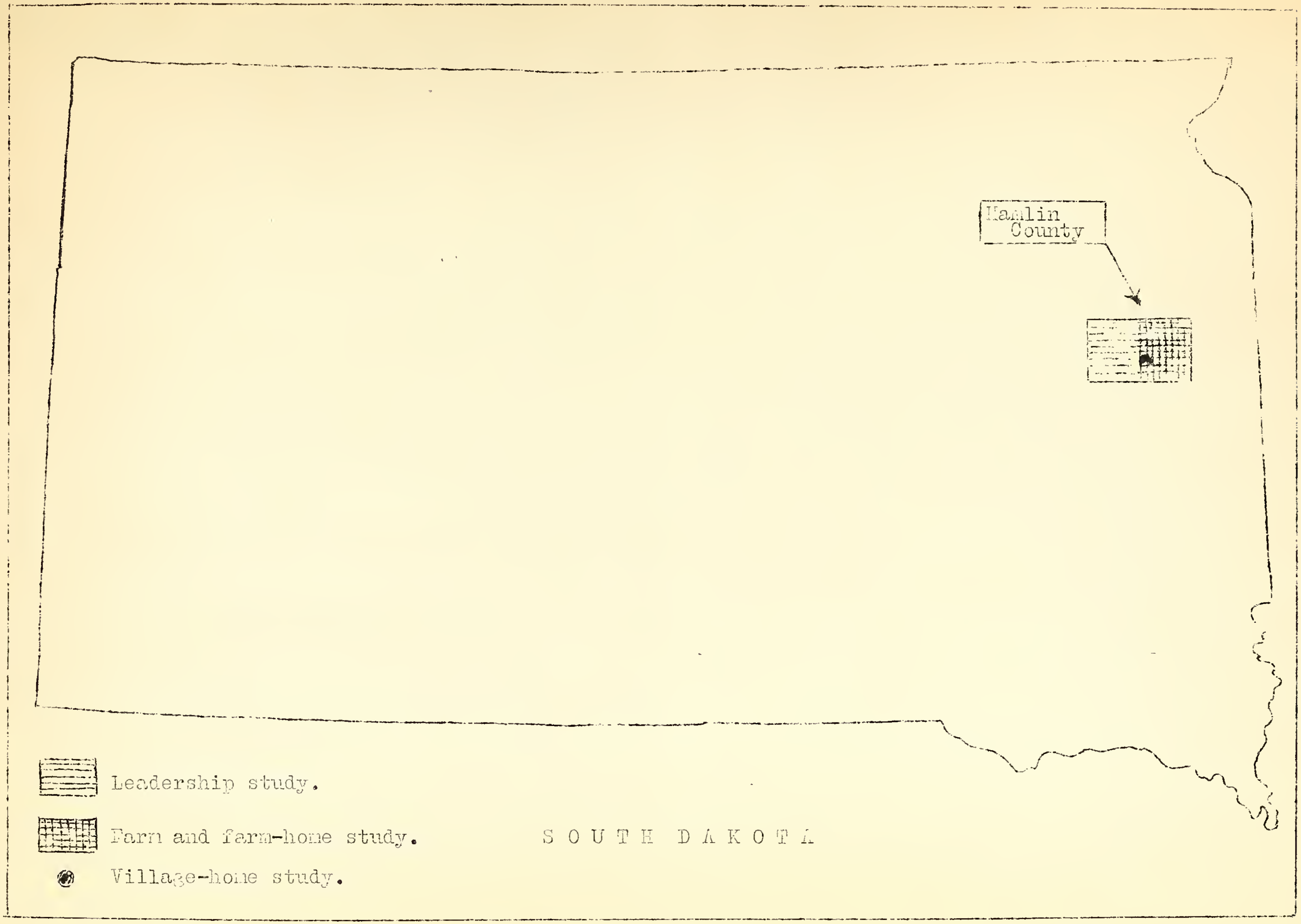


Fig. 4. - Map of South Dakota showing location of area included in the study

Brief History of Extension in County

The first county extension worker in Hamlin County was an emergency club agent employed during the latter part of 1918. (Table 1.) A county agricultural agent on a cooperative basis was employed early in 1919, and the county has had the continuous services of such an agent since that time. Beginning with 1921 the county has shared the services of a home demonstration agent with three other near-by counties.

Table 1. - Names and periods of service of county extension agents employed in Hamlin County

County agricultural agent	Home demonstration agent	Club agent
Arthur W. Tompkins Feb.1,1919-Apr.5,1924	Laura L. Jones* July 1,1923-Sept.15,1924	Elliott A. Parker Sept.1,1918-June 30,1920
Ross D. Davies Apr.7,1924 - date	Elizabeth M. Morey* Sept.15,1924 - date	

*District home demonstration agents covering the four counties of Codington, Clark, Deuel, and Hamlin.

THE EXTENT TO WHICH LOCAL EXTENSION LEADERS HAVE FUNCTIONED

Local leaders have been extensively used in forwarding the extension program locally, though on a somewhat different basis than in many States. Instead of selecting leaders to assist locally with all activities relating to a subject-matter line of work for an entire year or longer period as is the common practice in many States, the plan of selecting leaders to assist with specific jobs is followed. For example, a leader is selected to canvass his community to enroll farmers in a new egg marketing organization, or to obtain signers to a petition to insure the testing of all cattle in the county for tuberculosis on the area plan. When the assigned job is completed the person ceases to be a local leader until selected to assist with another job. In the home demonstration clubs instead of one or two leaders attending all the leader-training meetings relating to clothing or other subject-matter line of work, it has been the custom for the members to attend leader-training meetings in rotation, each repeating the method demonstration seen at the next meeting of the local group. In a club of ordinary size the same woman serves as leader for only one club meeting during a 12-month period. In this way nearly every member of the home demonstration club eventually comes in personal contact with the home demonstration agent and subject-matter specialists.

Where opportunity is offered for selection it is but natural that the persons who have handled one job particularly well are chosen to assist in other ways in forwarding the extension program locally.

Of the 169 local extension leaders from whom information was obtained, 75 were farm operators, 68 farm women, 25 village women and one a veterinarian (Table 2). One hundred and sixty-four of the leaders were interested in adult work and 11 in junior work. Six were concerned with both adult and junior work. Fifteen per cent of the leaders volunteered their services, 34 per cent were requested to serve by the extension agent, 17 per cent were appointed by other leaders and 34 per cent were elected by local people.

Two-thirds of the leaders included in the study reported having attended one or more meetings for the purpose of obtaining information to help him or her with the work as leader (Table 3). Considering all leaders the average length of service has been 1.8 years. During this time the leaders participated in 2.6 training meetings on the average.

Sixty-eight per cent of all leaders reported having assisted in conducting some formal extension activity like repeating a method demonstration learned at a leader-training meeting, or assisting in local arrangements for a community meeting. Practically the same proportion assisted in forwarding the extension program in other less formal ways. Only four leaders out of the 169 interviewed had failed to function in any way as leader.

That all required reports had been forwarded to the county extension office was the statement of 56 per cent of the leaders. Three leaders out of every four thought they had personally profited through their leadership work which consumed on the average, 5 days per year of the leader's time.

Table 2. - General information regarding local leaders

Item	Number	Percentage
Local leaders interviewed	169	100
Farmer leaders	75	44
Farm women leaders	68	40
Village women leaders	25	15
Leaders - other occupations	1	1
Leaders - adult work	164*	97
Leaders - junior work	11*	7
Volunteer leaders	26	15
Leaders appointed by extension agents	57	34
Leaders appointed by extension organization	28	17
Leaders elected by local people	58	34

*Six leaders handled both adult and junior work.

Table 3. - General information regarding local leaders-(continued)

Item	Number	Percentage
Leaders interviewed	169	100
Leaders attending training meetings	111	66
Average training meetings attended, (all leaders)	2.6	--
Leaders conducting formal activities	115	68
Leaders forwarding projects other ways	113	67
Leaders not functioning	4	2
Leaders reporting regularly	94	56
Average days devoted to work per year	5	--
Average years served as leader	1.8	--
Leaders personally profiting from leadership work	128	72
Persons influenced per leader (all leaders)	11.7	--
Practices adopted per leader due to leaders' activities	18.6	--

The 169 leaders reported having influenced 11.7 persons to adopt 18.6 different practices on the average, during the 1.8 years they had served as leaders, indicating that unpaid local leaders are rendering most valuable assistance to the paid extension workers in advancing the extension program. It is interesting to note that the average number of persons influenced per local leader in Hamlin County was approximately the same as found in a corresponding study in New Jersey.*

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*H. J. Baker and M. C. Wilson, Local Leadership and the Effectiveness of Extension Work in Reaching Rural People. New Jersey Extension Bulletin 50.

Local Leadership by Projects

Of the 169 local leaders, 108 were concerned with but one subject-matter line of work, 38 with two projects, and the remaining 23 with three or more projects. The projects with the largest number of local leaders involved, were clothing, bovine-tuberculosis eradication, and egg marketing. Considering only the 108 leaders of but a single line of work (Table 4), it is interesting to note that the leaders of the potato, farm crops, organization, tuberculosis, and clothing projects were somewhat more effective in influencing others to adopt improved practices than were the leaders of the swine, dairy, household pest, food preservation, and home-improvement projects.

Table 4. - Local leadership by projects*

Projects	Number of leaders	Average number of years served as leader	Training meetings attended per leader	Average days devoted to work per year	Persons influenced to change practices per leader
Clothing......	38	1.6	3.2	5.5	9.6
Bovine tuberculosis......	19	1.0	0.2	1.4	10.4
Organization..	17	2.6	6.9	8.8	10.2
Egg marketing..	6	1.0	0.8	1.3	7.5
Potatoes......	5	2.8	3.6	2.8	12.2
Food preparation.........	4	1.0	5.0	1.9	7.2
Food preservation.........	2	1.5	3.5	16.0	4.5
Home improvement.........	4	1.0	1.0	2.8	5.8
Farm crops.....	3	3.0	---	3.7	10.7
Household pests	3	1.3	1.3	3.0	1.0
Poultry.......	2	1.0	0.5	1.5	7.5
Swine.........	2	1.0	---	4.5	3.5
Creamery......	1	5.0	---	2.0	---
Dairy.........	1	1.0	---	1.0	4.0
Livestock shipping ass'n....	1	2.0	---	8.0	---

*Sixty-one leaders assisting with two or more projects have been omitted.

Method of Selecting Local Leaders

Under the plan followed in conducting extension work in Hamlin County, the leaders personally selected by the extension agent for a specific job were somewhat more effective as measured by the number of people influenced to adopt practices than were the leaders obtained in any other way (Table 5). The leaders selected by the extension agents also spent much less time per year on leadership work than the leaders selected in other ways. Whether the leaders volunteered their services, were appointed by other local leaders or some cooperating organizations, or were elected by the local people seems to have been of little importance since the leaders obtained in all three ways were about equally effective.

Occupation of Local Leaders

Farmer leaders and farm women leaders were about equal in effectiveness, since both groups influenced 12 persons on the average to adopt improved practices (Table 6). The village women leaders influenced only about two-thirds as many persons on the average as did the farm women leaders. The ease with which a person living in the village may get in touch with other people does not seem to have been an important factor in the spread of better home practices in Hamlin County.

Education of Local Leaders

Of the 169 local leaders, 106 had had only common school education; 43 had had a partial or complete high school course; whereas the remaining 20 had had some college training (Table 7). Measuring effectiveness in terms of the number of persons influenced, the college trained leaders were 17 per cent more effective than the leaders with some high-school training and 43 per cent more effective than the leaders with only a common school education. This would seem to indicate that an effort should be made to select leaders with a good educational background in so far as they are available.

Table 5. - Method of selecting local leaders as related to their effectiveness

Group	Number of leaders	Training meetings attended per leader	Average days devoted to work per year	Persons influenced to change practices per leader
Volunteer	26	2.5	5.0	9.8
Appointed by extension agents	57	0.8	2.8	14.5
Appointed by extension organization	28	3.2	6.5	10.6
Elected by local people	58	4.2	6.5	10.2

Table 6. - The relationship of occupations of local leaders to their effectiveness

Group	Number of leaders	Training meetings attended per leader	Average days devoted to work per year	Persons influenced to change practices per leader
Farmers	75	1.4	2.8	12.1
Farm women	68	4.1	7.3	12.4
Village women	25	2.3	5.2	8.6
Other	1	---	7	2

Table 7. - Education as related to effectiveness of local leaders

Group Educated at:	Number of leaders	Training meetings attended per leader	Average days devoted to work per year	Persons influenced to change practices per leader
Common school	106	2.5	5.0	10.8
High school	43	3.1	5.2	12.1
College	20	2.2	4.8	15.2

Adult Work Compared with Junior Work

While the number of leaders of junior work, five only, is too small for satisfactory comparison with the leaders of adult work, it will be noted that these five leaders influenced less than half as many adults to adopt improved practices on the average as did the leaders of adult work (Table 8). Many of the activities of leaders of junior work are apparently of such a nature as to have little influence upon the spread of better farm and home practices to adults and to boys and girls outside the club groups.

Leader-Training Meetings

The holding of leader-training meetings to more thoroughly acquaint local leaders with their leadership duties and responsibilities, while important, does not seem to have increased the effectiveness of local leaders as much as might be expected (Table 9). It is probable that the plan of selecting leaders for a specific piece of work requiring but a short period of time tends to place less emphasis on formal training of leaders in groups. Where the work of the local leader involves only the carrying out of simple directions, these instructions can doubtless be placed in the hands of leaders through correspondence, or a personal visit, as effectively as in group meetings.

Table 8. - Leadership of adult work compared in Effectiveness with leadership of junior work

Group	Number of leaders	Training meetings attended per leader	Average days devoted to work per year	Persons influenced to change practices per leader
Adult work.....	158	2.6	4.6	11.7
Junior work....	5	0.2	4	5.4

Six leaders handling both adult and junior work not included.

Table 9. - Influence of leader-training meetings upon effectiveness of leadership

Group	Number of leaders	Training meetings attended per leader	Average days devoted to work per year	Persons influenced to change practices per leader
Training meetings attended............	111	4	6.4	12.3
Training meetings not attended........	58	---	2.5	10.5

Leaders Reporting

The 169 leaders studied were about equally divided between those submitting reports of their activities to the extension office and those not reporting (Table 10). Both groups attended approximately the same number of leader-training meetings on the average. The leaders reporting devoted 1.5 more days per year to leadership work on the average than the leaders in the other group. The number of persons influenced per leader was more than one-third greater in the case of the leader reporting than in the case of those not reporting. That those leaders not submitting the required reports of their work to the extension office influenced approximately two-thirds as many persons as did those leaders who reported is significant.

Table 10. - Comparative effectiveness of leaders reporting their activities and those not reporting

Group	Number of leaders	Training meetings attended per leader	Average days devoted to work per year	Persons influenced to change practices per leader
Leaders submitting reports to extension office........	93	2.7	5.6	13.3
Leaders not reporting...............	76	2.5	4.3	9.7

EFFECTIVENESS OF EXTENSION WORK IN REACHING FARM PEOPLE

The operators of the 439 farms involved in this phase of the study were about equally divided between owners and tenants, 49 per cent being owners and 51 per cent tenants (Table 11). Seventy-seven per cent of the farm homes reported children under 21 years of age at home. Sixty per cent of the farm homes had telephones. Seventy-five per cent were located on roads, which had been graded, or graded and surfaced with gravel. The average farm contained 284 acres and was 14 miles from the county extension office.

Membership in the Farmers and Home-makers' Associations

Slightly more than half of the farmers interviewed belonged to the livestock shipping association (Table 12). Thirty-four per cent were members of farmers' elevators, 26 per cent were members of the farm bureau, 25 per cent of cooperative creameries, and 18 per cent of the egg marketing association. Twenty per cent of the farm home makers were members of home demonstration clubs.

Participation in Extension Activities and Contact with Extension Workers

In the case of one farm in seven, the farm operator, his wife, or some other member of the family was either a local leader or had served in that capacity at some previous time (Table 13). Formal extension activities, such as adult or junior result demonstrations, field meetings, meetings of home demonstration, and boys' and girls' club groups were reported for 15 per cent of the farms and 17 per cent of the farm homes. An additional 44 per cent of the farms had been represented at similar activities held on neighboring farms or at community centers.

Boys and girls were either enrolled in club work or had at some previous time been so enrolled in the case of 13 per cent of the 439 farms and farm homes.

Table 11. - General information relating to farms included in study

Item	Number	Percentage
Farm and home records obtained	439	100
Farms operated by owners	217	49
Farms operated by tenants	222	51
Adults per farm	2.3	
Farms with children under 21 years	337	77
Children per farm with children	3.4	
Average size of farm (acres)	284	
Farms having telephones	264	60
Farms located on improved roads	330	75
Farms located on unimproved roads	109	25
Average distance to county extension office	14	

Table 12. - Membership in the farmers and homemakers' associations

Name of Association	Number of members	Percentage of all farms
Livestock shipping association	239	54
Farmers' elevator	155	34
Farm bureau	112	26
Cooperative creamery	110	25
Home demonstration clubs	90	20
Egg marketing association	77	18
Potato marketing association	41	9
Cow-testing association	10	2
Potato-seed growers' association	7	2
Miscellaneous	13	3

Table 13. - Participation in extension activities and contact with extension workers

Item	Number	Percentage
Records obtained	439	100
Farms represented by local leaders	63	14
Farms on which extension activities were conducted	66	15
Homes in which extension activities were conducted	75	17
Other farms participating in extension activities	194	44
Farms with boys and girls in club work	56	13
Farms reporting contact with:		
Some member of the extension service	379	86
County Agent	369	84
Home demonstration agent	111	25
Specialists	146	33

Contact with some member of the extension service staff as the result of farm and home visits, office calls, personal correspondence, attendance at meetings and the like, was reported by some member of the farm family for 86 per cent of all the farms studied. That the county agricultural agent had been in touch with a member of the farm family was reported in the case of 84 per cent of the farms. Twenty-five per cent of the farm women had had contact with the home demonstration agent. Personal contact with a specialist from the State agricultural college was reported for 33 per cent of the farms.

Farms and Homes Definitely Reached

The adoption of some farm or home practice as the result of extension effort was reported by the farmer or farm woman for 89 per cent of the farms included in the study (Table 14). The average number of practices adopted on these farms was 3.6. It is probable that more practices were adopted than were reported owing to the natural unwillingness to give credit to outside agencies and to failure to recall during the brief interview practices adopted several years before. Eighty-six per cent of the farms reported the adoption of agricultural practices and 34 per cent of the homes the adoption of home-economics practices.

Table 14. - Farms and homes reporting the adoption of new practices

Item	Number	Percentage
Farm records obtained	439	100
Farms on which some practices had been changed	390	89
Average number of practices changed per farm	3.6	--
Farms on which agricultural practices had been changed	379	86
Average number of agricultural practices changed	3.0	--
Homes in which home-economics practices had been changed	149	34
Average number of home-economics practices changed	2.0	--

Methods Which Influenced Farms and Homes to Change Practices and Extension Agents Involved *

In connection with each farm and home practice adopted, information was obtained regarding the means and agencies employed in extension which the farmer and home maker thought had in any way influenced them to adopt the practice. A note was made of extension agent or agents involved in each case. In many cases the adoption of the improved practice was the result of the cumulative effect of several methods. In other cases the influence of a single method was outstanding. In still other cases it was difficult to clearly identify the methods responsible, the adoption of the practice tracing indirectly to the activities of the extension service.

For the purpose of this study the common methods employed in extension have been roughly divided into three groups. (1) The propaganda group, including general meetings, bulletins, circular letters, news stories, and other means largely devoted to urging in a wholesale way the acceptance of better farm and home practices; (2) the personal-service group, including farm and home visits, office calls, correspondence, and similar means largely concerned with rendering service to the individual farmer and farm woman; (3) the object-lesson group, including result demonstrations, both adult and junior and method demonstrations, aiming to show by practical application the desirability of adopting certain practices.

---

*Throughout this discussion of methods and agencies the reader should keep in mind that the adoption of a single practice may have been influenced by several extension methods and by more than one kind of extension agent.

The influence of methods falling in the propaganda group were reported in the case of 185 or 47 per cent of 390 farms adopting improved practices (Table 15). Methods in the personal-service group were reported by 39 per cent of the farms reached and object-lesson methods by 32 per cent of the farms. Influences which could not be credited directly to methods fully in any of the foregoing groups were reported for 78 per cent of the farms changing practices.

The influence of the agricultural agent was reported by 74 per cent of the farms adopting practices; 24 per cent of the homes reported the influence of the home demonstration agent; 22 per cent of the farms and homes mentioned the influence of subject-matter specialists. That local leaders of extension had assisted in bringing about the adoption of better practices was reported by 77 per cent of the 390 farms and homes putting into practice teachings of the extension service.

Table 15. - Methods which influenced farms to change practices and extension agents involved

Item	Number	Percentage
Farms on which some practice had been changed	390	89
Farms influenced by:		
Propaganda methods	185	47
Personal-service methods	152	39
Object-lesson methods	124	32
Indirect influences	306	78
Farms influenced by:		
Agricultural agent	289	74
Home demonstration agent	92	24
Specialists	86	22
Farms assisted by local leaders	302	77

Practices Changed and Influences Responsible

The 390 farms definitely reached by extension reported the adoption of 1,414 better farm and home practices; 1,122 of these related to agriculture and 292 to home economics. The extension methods influencing the adoption of the practice and the extension agents involved were reported in each case (Table 16). Propaganda methods were reported in connection with 28 per cent of all practices adopted; personal-service methods with 21 per cent, object-lesson methods with 17 per cent, and indirect influence in connection with 41 per cent of the practices changed.

That the agricultural agent had influenced the adoption of the practice was reported for 57 per cent of all practices changed, the home demonstration agent for 13 per cent, and subject-matter specialists for 10 per cent of the practices. That assistance had been rendered by local leaders was reported in the case of 33 per cent of the practices.

The relative frequency with which the individual extension methods were reported in connection with the practices adopted is given in Table 17.

Indirect influences head the list with 41 per cent of the practices involved, followed by method demonstrations 17 per cent, general meetings 14 per cent, farm and home visits 14 per cent, news stories 10 per cent, bulletins 7 per cent, and office calls mentioned in connection with 5 per cent of the practices adopted. With many practices the influence of more than one teaching method was reported.

A list of the improved practices adopted on the farmsand in the homes studied is found in Table 18.

Table 16. - Methods which influenced changes in practices

Item	Number	Percentage
Practices changed	1,414	100
Agricultural practices changed	1,122	----
Home-economics practices changed	292	
Practices influenced by:		
Propaganda methods	397	28
Personal-service methods	294	21
Object-lesson methods	247	17
Indirect influences	579	41
Practices influenced by:		
Agricultural agent	810	57
Home demonstration agent	178	13
Specialists	145	10
Practices with which local leaders assisted	467	33

Table 17. - Relative frequency with which extension methods were reported

Method	Percentage of practices changed
Indirect	40.9
Method demonstrations	16.8
Meetings	13.8
Farm and home visits	13.6
News stories	10.0
Bulletins	6.7
Office calls	4.7
Correspondence	1.5
Leader training	1.2
Junior result demonstrations	1.1
Extension schools	1.0
Adult result demonstrations	.4
Circular letters	.4
Telephone	.2
Exhibits	.1

Table 18. - Improved practices adopted by farms or homes

Practice	Number of farms	Percentage of all farms
Agricultural practices:		
Eradication bovine tuberculosis	292	66.5
Poultry culling	89	20.3
Livestock marketing	82	18.7
Potato diseases	82	18.7
Miscellaneous agriculture	54	12.5
Animal-disease control	52	11.8

Table 18. (Continued) Improved practices adopted by farms or homes

Practice	Number of farms	Percentage of all farms
Wilt-proof flax	44	10.0
Corn-seed testing	43	9.8
Cream marketing	40	9.1
Egg marketing	37	8.4
Alfalfa	30	6.8
Certified potato seed	29	6.6
Potato marketing	28	6.4
Miscellaneous marketing	23	5.2
Dairy records	23	5.2
Grain varieties	22	5
Improved livestock	17	3.9
Sweet clover	17	3.9
Miscellaneous crops	14	3.2
Dairy feeding	12	2.7
Land clearing	12	2.7
Poultry diseases	12	2.7
Livestock feeding	11	2.5
Treating seed grain	11	2.5
Hog feeding	10	2.3
Caponizing	10	2.3
Soy beans	8	1.8
Swine	6	1.4
Poultry	5	1.1
Poultry feeding	5	1.1
Miscellaneous livestock	3	.7
Home-economics practices:		
Canning	103	23.4
Sewing	53	12.0
Millinery	27	6.2
Miscellaneous home economics	27	6.2
Clothing	16	3.6
Cooking	16	3.6
Christmas gifts	14	3.2
Dress forms	8	1.8
Patterns	7	1.6
Candy making	6	1.4
Making flowers	5	1.1
Painting furniture	5	1.1
Household pests	4	0.9

The tuberculin testing of cattle in an effort to eradicate bovine tuberculosis was the leading agricultural practice adopted on these farms largely due to the successful campaign conducted as a part of the extension program for Hamlin County. Other important agricultural practices adopted were poultry culling and potato-disease control. Canning of fruits and vegetables was the home-economics practice adopted in the largest number of homes with general sewing and millinery next in order.

Other Factors Influencing the Adoption of Practices

In addition to the means and agencies employed in extension teaching there are many other factors which may also affect the adoption of improved practices. Some of these factors are condition of land occupancy, size of farm, distance from extension office, character of roads, contact with extension workers, and participation in extension activities.

Condition of Land Occupancy

As indicated in Table 19 in the case of those farms where the operator was also the owner, a slightly higher percentage of farms reported the adoption of practices and on the average adopted nearly one practice more, than in the case of the tenant operators. The difference of 2 per cent between the two groups is so slight, however, as to be of little significance. Extension seems to be reaching tenants and owner operators about equally effectively.

Table 19. - Condition of land occupancy in relation to change of practices

Group	Number of farms	Percentage of all farms	Average size	Percentage of farms changing practices			Average number of practices changed
				Agriculture	Home economics	Any practice	
Owners	217	49	300	88	36	90	4.0
Tenants	222	51	268	85	32	88	3.2

Size of Farm

Upon dividing the 439 farms into three size groups, small, medium, and large, depending upon the total acreage in the farm, it is apparent that all three size groups have been reached about equally effectively (Table 20). In agricultural practices only, 88 per cent of the large farms reported the adoption of improved practices as compared to 86 per cent of both the medium and the small-sized farms. Considering both agricultural and home-economics practices, 92 per cent of the large farms changed a farm or home practice as compared to 87 per cent of the medium-sized farms and 89 per cent of the small farms. The medium and large farms adopted 3.8 practices on the average whereas the small farms averaged 3.5 practices.

Distance from Extension Office

In studying the influence of distance from the county extension office upon the adoption of improved practices, the 439 farms have been divided into three groups - those less than 10 miles away, those from 10 to 19 miles away, and those 19½ miles or farther away (Table 21). Considering agricultural practices only, the percentage of farms adopting practices varied from 91 per cent for the nearest group to 86 per cent for the group 10 to 19 miles away, to 81 per cent for the group farthest away. Considering home practices the influence of distance from the extension office was less noticeable, the corresponding percentages being 53, 36, and 32 per cent. The average number of all practices adopted was slightly higher for the farms and homes nearest the extension office. Apparently the farmers and home makers nearest the extension headquarters make use of their opportunity for frequent contact with the extension workers.

Table 20. - Relation of size of farms to number of farms changing practices

Group	Number of farms	Average size	Percentage of farms changing practices			Average number of practices changed
			Agriculture	Home economics	Any practice	
1 to 160 acres-------	150	146	86	53	89	5.3
161 to 320 acres-------	189	278	86	34	87	5.8
321 - over acres-------	100	503	88	53	92	5.8

Table 21. - Relation of distance of farm from extension office to change of practices

Group	Number of farms	Percentage of all farms	Percentage of farms changing practices			Average number of practices changed
			Agriculture	Home economics	Any practice	
1 to 9½ miles	126	29	91	33	94	4.0
10 to 19 miles	194	44	86	36	89	3.4
19½ miles and over	119	27	81	32	82	3.6

Nature of Roads

About one-fourth of the farms included in the study were situated on unimproved earth roads, the remaining three-fourths being located on graded or graveled roads (Table 22). Eighty-six per cent of the farms on the unimproved roads reported the adoption of practices as compared to 89 per cent of the farms on graded roads, and 95 per cent of the farms on gravel roads. The farms on the gravel roads were all near the extension office but the number of them is too small for satisfactory comparison. It is evident, however, that the farms on the unimproved side roads are being reached just about as effectively as the farms on the unimproved main highways.

Participation in Extension Activities

The conducting of some formal extension activity on the farm or in the home was followed by the adoption of improved practices in 97 per cent (Table 23). Where only extension activities on neighboring farms or at community centers were attended, the adoption of improved practices was reported for 93 per cent of the farms. Where no member of the farm family had ever attended an extension meeting or similar activity, 75 per cent had changed practices. The average number of practices adopted was 5.1, 3.6 and 1.8, respectively, for the three groups. Considering agricultural and home-economics practices separately, it will be noted that participation in extension activities had a much greater influence upon the adoption of home practices. Where the farm family was not represented in any extension activity, 74 per cent changed farm practices, whereas but seven per cent changed home practices.

Table 22. - Nature of roads in relation to the change of practices

Group	Number of farms	Percentage of all farms	Percentage of farms changing practices			Average number of practices changed
			Agriculture	Home economics	Any practice	
Located on dirt roads-	109	25	84	27	86	3.6
Located on graded roads-	311	71	86	38	89	3.6
Located on gravel roads-	19	4	95	16	95	4.7

Table 23. - Participation in extension activities as bearing on the change of practices

Group	Number of farms	Percentage of all farms	Percentage of farms changing practices			Average number of practices changed
			Agriculture	Home economics	Any practice	
Farms having extension activities on farm or in home--	119	27	94	58	97	5.1
Other farms participating in extension activities--	194	44	90	36	93	3.6
Farms not participating in extension activities--	126	29	74	7	75	1.8

Contact With Extension Workers

Where the farm operator, his wife, or some other member of the family had been in touch with representatives of the extension service the adoption of improved practices was reported for 94 per cent of the farms (Table 24). Where no such contacts had been made 58 per cent of the farms adopted improved practices. Again it appears that contact with extension work is more closely associated with the adoption of improved home practices than with farm practices. The average number of all practices adopted was 3.8 in the contact group as compared to 1.3 in the no contact group. The relationship of contacts with extension workers and participation in extension activities is necessarily very close since many of the contacts were made at demonstration meetings, community meetings, and similar activities.

Boys' and Girls' Club Work

Eighty-seven boys and girls in 56 farm homes either were enrolled in a club project or had been so enrolled at some previous time. These boys and girls represented 17 per cent of all the children between the ages of 10 and 20 years found in the farm homes studied (Table 25). The boys and girls in club work at the time the field data were collected were slightly more than 6 per cent of the boys and girls of club age. The 1925 club members average 14.2 years of age. Twelve per cent of them were not in school. Of the practices adopted on the 459 farms studied, but 1.1 per cent of them were in any way credited to the influence of the result demonstrations conducted by the junior club members.

Table 24. - Contact with county extension agents and specialists as related to the change of practices

Group	Number of farms	Percentage of all farms	Percentage of farms changing practices			Average number of practices changed
			Agriculture	Home economics	Any practice	
Farms having made contacts with extension workers	380	87	91	39	94	3.8
Farms having made no contacts	59	13	58	2	58	1.5

Table 25. - Farms and children in junior project work

Farm and home records obtained	459
Percentage of families with children of club age (10 to 20 years)	46.7
Number of children of club age (10 to 20 years)	520
Number of families with boys and girls in 4-H clubs (ever)	56
Percentage of families with boys and girls in 4-H clubs (ever)	12.7
Number of boys and girls in club work (ever)	87
Percentage of boys and girls (10 to 20 years) in club work (ever)	16.7
Percentage of boys and girls in club work (1925)	6.5
Average age of boys and girls in club work (1925)	14.2
Percentage of 1925 club members not in school	11.8
Percentage of all practices adopted due to junior result demonstrations	1.1

Attitude of Farmers Toward Extension

Following the interview with each farmer and farm woman, an estimate was made of the attitude toward extension work. Fifty-eight per cent of the 439 farms were reported favorable to the extension service; 33 per cent were reported indifferent; 8 per cent were reported opposed. No attitude was recorded for the remaining 1 per cent (Table 26).

THE INFLUENCE OF EXTENSION ON VILLAGE HOMES

The 92 village home records were obtained in the small country village of Lake Norden, located on the edge of the area included in the farm study. The home demonstration work carried on in the village was identical with that carried on with the farm women; in fact farm women and village women worked side by side in the Lake Norden home demonstration club.

Sixty per cent of the village families studied owned their homes; the remaining 40 per cent rented (Table 27). One-third of the village homes had children of club age. Twenty per cent of the village homes were equipped with telephones. The village of Lake Norden is 6 miles from the county extension headquarters.

Table 26. - Attitude toward extension

Item	Number	Percentage
Farm records obtained----------------	439	100
Farms reported favorable-------------	254	58
Farms reported indifferent-----------	144	33
Farms reported opposed---------------	36	8
Farms for which no attitude was reported-----------------------	5	1

Table 27. - General information regarding village homes

Item	Number	Percentage
Records obtained-------------------------------	92	100
Homes owned------------------------------------	55	60
Homes rented-----------------------------------	37	40
Adults per home--------------------------------	2.0	--
Homes with children 10 to 20 years of age------	30	33
Children 10 to 20 years of age-----------------	61	--
Average distance to extension office (miles)---	6.0	--
Homes having telephones------------------------	18	20

Participation in Extension Activities and Contact with Extension Workers

Extension activities participated in by the village homes were naturally limited to home demonstration and boys' and girls' club work (Table 28). In 22 per cent of the 92 village homes studied the home maker or some other member of the family was or had been a local extension leader. Fifty-three per cent of the homes had been represented in extension activities either held in their own or in neighboring homes or in convenient centers. Forty-six per cent of the homes had been in touch with some extension worker, in most cases the home demonstration agent or one of the home-economics specialists from the college. Assistance from local leaders was reported by 46 per cent of the homes. Eighteen per cent of the village boys and girls, representing 8 per cent of the homes either were or had been in club work.

Homes Influenced to Adopt Improved Practices

The adoption of one or more improved home practices was reported for 59 per cent of the 92 village homes included in the study (Table 29). The village home reached averaged 4.9 practices changed. Apparently home demonstration work has reached a larger percentage of the village home makers than of the farm home makers and has reached them twice as intensively since it will be remembered (Table 14, p.17) that but 34 per cent of the farm women reported the adoption of two home-economics practices on the average.

Table 28. - Participation in extension activities and contact with extension workers

Item	Number	Percentage
Village home records obtained	92	100
Homes represented by local leaders	20	22
Homes in which extension activities were conducted	20	22
Other homes participating in extension activities	29	31
Homes with boys and girls in club work	7	8
Boys and girls of club age (10 to 20 years) in club work	11	18
Homes reporting contact with:		
Some member of extension service	42	46
County Agricultural agent	2	2
Home demonstration agent	36	39
Specialists	20	22
Homes reporting assistance from local leaders	42	46

Table 29. - Village homes reporting the adoption of new practices

Item	Number	Percentage
Home records obtained	92	100
Homes in which home-economics practices had been changed	54	59
Home-economics practices adopted	263	--
Average number of home-economics practices changed per home reached	4.9	--

Methods Which Influenced Change of Practices in Village Homes

The method demonstration was the outstanding extension method reported in connection with practices changed in village homes, having been mentioned in connection with 73 per cent of all practices adopted (Table 30). This would seem to be the natural result of the emphasis placed upon this means in forwarding home demonstration work. Leader-training meetings were reported as having influenced 16 per cent of the changed practices. This percentage is high due to the plan of rotating local leadership followed by the home demonstration clubs in Hamlin County. Other extension methods reported as having influenced the adoption of practices in village homes were indirect influences, general meetings, bulletins, and news stories.

The Influence of Other Factors Upon the Adoption of Practices in Village Homes

Many of the factors discussed in connection with the influences of extension work upon farmers and farm home makers do not apply to village home makers. Such factors as condition of home occupancy, participation in extension activities, and contact with extension workers may well be considered, however.

Condition of Home Occupancy

Sixty per cent of the home owners reported the adoption of practices as compared to 57 per cent of the families renting their homes (Table 31). The average number of practices was slightly higher in the renter group. As in the case of the farm homes, extension seems to have reached home owners and renters with about the same degree of effectiveness.

Table 30. - Relative frequency with which methods were reported in connection with practices changed in village homes

Method responsible	Percentage of practices changed
Method demonstrations	72.6
Leader training	15.6
Indirect	6.5
General meetings	5.7
Bulletins	1.9
News stories	.4

Table 31. - Influence of condition of home occupancy upon number of village homes changing practices

Group	Number of homes	Percentage of all homes	Percentage of homes changing home-economics practices	Average number of practices changed
Owners	55	60	60	4.7
Renters	37	40	57	5.1

Participation in Extension Activities

Eighty-five per cent of the homes in which extension activities had been conducted, and 96 per cent of the other homes represented at extension activities reported the adoption of improved home practices as compared to 21 per cent of the homes where no member of the family had attended formal extension activities (Table 32). The average number of improved practices adopted was 6.3, 5.2, and 1.0, respectively, for the three groups.

Contact With Extension Workers

Where some representative of the village home had been in touch with members of the extension service, changed practices were reported in 95 per cent of the cases (Table 33). This was true of but 28 per cent of the homes not enjoying such contacts. The homes in the former group also adopted four times as many practices on the average as the homes in the latter group.

While participation in extension activities and contact with extension workers is closely related to changed practices in village homes, these factors do not seem so essential in connection with village homes as in the case of farm homes (Tables 23 and 24, pp. 25 and 26).

Attitude of Village Homes Toward Extension Work

As in the case of the farm homes visited, an estimate was made of the attitude of the village families interviewed toward the estension service (Table 34). Seventy per cent of the village homes were reported favorable, 27 per cent indifferent and 1 per cent opposed. No attitude was recorded for 2 per cent of the village homes. The percentage of village homes favorable to extension is 12 per cent higher, and the percentage opposed 7 per cent lower than for the farms in the area studied (Table 26).

Table 32. - Participation in extension activities as bearing on practices changed in village homes

Group	Number of homes	Percentage of all homes	Percentage of homes changing home-economics practices	Average number of practices changed
Homes having extension activities in homes	20	22	85	6.5
Other homes participating in extension activities	29	31	96	5.2
Homes not participating in extension activities	43	47	21	1.0

Table 33. - Contact with county extension agents and specialists as related to change of practices in village homes

Group	Number of homes	Percentage of all homes	Percentage of homes changing home-economics practices	Average number of practices changed
Homes having made contacts with extension workers	42	46	95	6.0
Homes having made no contacts	50	54	28	1.4

Table 54. - Attitude of village homes toward extension work

Item	Number	Percentage
Village records obtained	92	100
Homes reported favorable to extension	64	70
Homes reported indifferent to extension	25	27
Homes reported opposed to extension	1	1
Homes for which no attitude was reported	2	2

SUMMARY

The study includes 169 local extension leaders, 439 farms and farm homes, and 92 village homes in Hamlin County, S. Dak.

The 169 local leaders devoted five days per year to leadership work on the average and during the 1.8 years served as leader, each influenced 11.7 persons to adopt 18.5 practices advocated by the extension service.

The leaders selected by the extension workers for specific jobs, were about 40 per cent more effective in passing on improved practices to others than the leaders appointed by the cooperating organizations, elected by the local people, or who volunteered their services.

The farmers and farm women serving as leaders were somewhat more effective than the village women leaders.

The leaders with some college training were 17 per cent more effective than the leaders with high-school training, and 43 per cent more effective than the leaders with only a common-school education, indicating that educational training is a very important qualification for local leadership in extension.

Improved farm or home practices had been incorporated as a part of the farm and home operations on 89 per cent of the 439 farms included in the study. Agricultural practices had been adopted on 86 per cent of the farms and home-economics practices in 34 per cent of the farm homes. Fifty-nine per cent of the 92 village homes reported the adoption of improved home practices.

Aside from the indirect influence of extension teaching, the principal methods reported as having influenced the 1,414 farm and home practices adopted, were method demonstrations, general meetings, farm and home visits, news stories, and bulletins. The method demonstration, leader-training meetings, indirect influence, and news stories, were the outstanding means and agencies reported as having influenced adoption of practices in village homes.

Although a slightly higher percentage of farm and home owners reported changed practices than was true of those renting farms and homes, the difference is too small to have any significance.

Large and small farmers were reached with equal effectiveness.

With increased distances from the county extension office the percentage of farms adopting practices decreased slightly.

The chance of the farmer adopting improved practices was somewhat greater if the farmstead was located on a gravel or graded road, than on an unimproved road.

Considering all those factors over which the extension agent can have little influence, it would seem that they have had only a slight influence upon the adoption of improved practices, as extension has been conducted in Hamlin County. However, attendance at extension meetings, or participation in other activities, and contact with extension workers, both factors largely under the control of the extension agent, - have had a marked influence upon the adoption of practices.

Where some member of the farm or village family had attended extension activities or made contact with a representative of the extension service, adoption of improved practices followed in more than 9 out of every 10 cases. Where no activities had been attended, or other contacts made with extension workers, but 6 out of 10 farmers, and but 1 out of 4 village home makers changed practices.

Seventeen per cent of the farm boys and girls, and 18 per cent of the village boys and girls 10 to 20 years of age, were conducting or had conducted a club project.

The Cooperative Extension Service has been accepted by a large majority of the rural people. Six out of 10 people were reported favorable, and less than 1 out of 10 opposed, the remainder being classed as indifferent.

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